ABSTRACT OF THE DISCLOSURE

Advanced Islet Separation Technology incorporates an automated method, automated control methodology, process control interface, and automated apparatus to separate (isolate) and process pancreatic islets in a tissue suspension in physiologic process solution, utilizing microprocessor computer control or microprocessor computer control and software programming to interface and control the process temperature, fluid flowrate, percent hydrogen concentration, dissolved oxygen concentration, endotoxin concentration, dissolved nitric oxide concentration, dissolved nitric oxide synthase concentration, proteolytic enzyme activity, and pressure of the islet containing physiologic process solution, including real-time process data acquisition and recording of the process variables.